

Stand



REVERSE THE SHRINKING EFFECTS OF TIME BY GIVING YOUR POSTURE A BOOST. MOIRA MERRITHEW, 48, OF STOTT PILATES, LEADS THE WAY

BY NANCY LEPATOUREL
PHOTOGRAPHY BY LAURA ARSIÉ

Do you feel yourself shrinking? It's not your imagination. A new study out of Harvard University found that after the age of 40, women lose about half an inch per decade. Why? As we get older, our bones become less dense and more brittle. By age 70, the average woman's skeleton is one-third lighter than it was at 40. This change in composition contributes to tiny vertebral fractures that compress the spine, decreasing our height. While these vertebral fractures account for about 30 per cent of height loss, the other **70 per cent can be attributed to bad posture.** Years spent hunched over a computer, for example, cause our shoulders to roll forward. When back muscles weaken naturally with age, this hunching becomes more pronounced. Moira Merrithew, 48, co-founder of Stott Pilates in Toronto, has created a posture-perfecting workout that **can be done anywhere and takes just 10 minutes.** "This workout balances the forward and backward movements of the spine with rotation," says Merrithew. "People get back problems when they focus only on abs, and ignore the lower back. You need balance." For optimum results, do the following exercises once a day, four times a week. "Try it in the morning; it's a great way to start the day."

Stand tall



AB PREP

Why it's important Helps prevent back pain and helps you stand tall by strengthening the deep, supportive muscles in the abdomen and lower back.

How to Lie on your back on the floor, knees bent and feet hip distance apart; let your arms relax at your sides (A). Breathe in through the nose, then exhale through the mouth as you contract your abs, lifting the pelvic floor, but not your actual pelvis. Repeat three times. On the fourth inhalation, nod your head. Exhale, contracting your abs, and flex your upper spine as high as you can while maintaining your lower back in a neutral position with its natural curvature (B). Inhale at the top and exhale as you slowly lower to the start position. Repeat five to 10 times.

Avoid the bulge Your stomach muscles shouldn't bulge when your spine is in a flexed position. If they do, you are no longer working the deep abdominal muscles that help stabilize your lower back.

Technique tricks Your lower back should be in a neutral position throughout. To check, place the heels of your hands on your hips with your fingers pointed toward your pubic bone. Visualize being able to balance a glass of water on your stomach without spilling it.



SPINE TWIST

Why it's important Creates endurance in the spinal muscles, which is important for stamina. Great for anyone who feels lower back pain after a long walk or a game of golf or tennis.

How to Sit cross-legged on the floor with your arms crossed at shoulder height in front of your body (A). Breathe in to prepare; then exhale as you rotate to the right (B). Breathe in, releasing slightly; then exhale, rotating a little further. Repeat. Do the same series on the opposite side. Continue side to side until you have done exercises five times each.

Tight hips? Sit on a pillow or step instead of the floor.

Technique tricks The series of three progressive reaches increases mobility without straining joints.

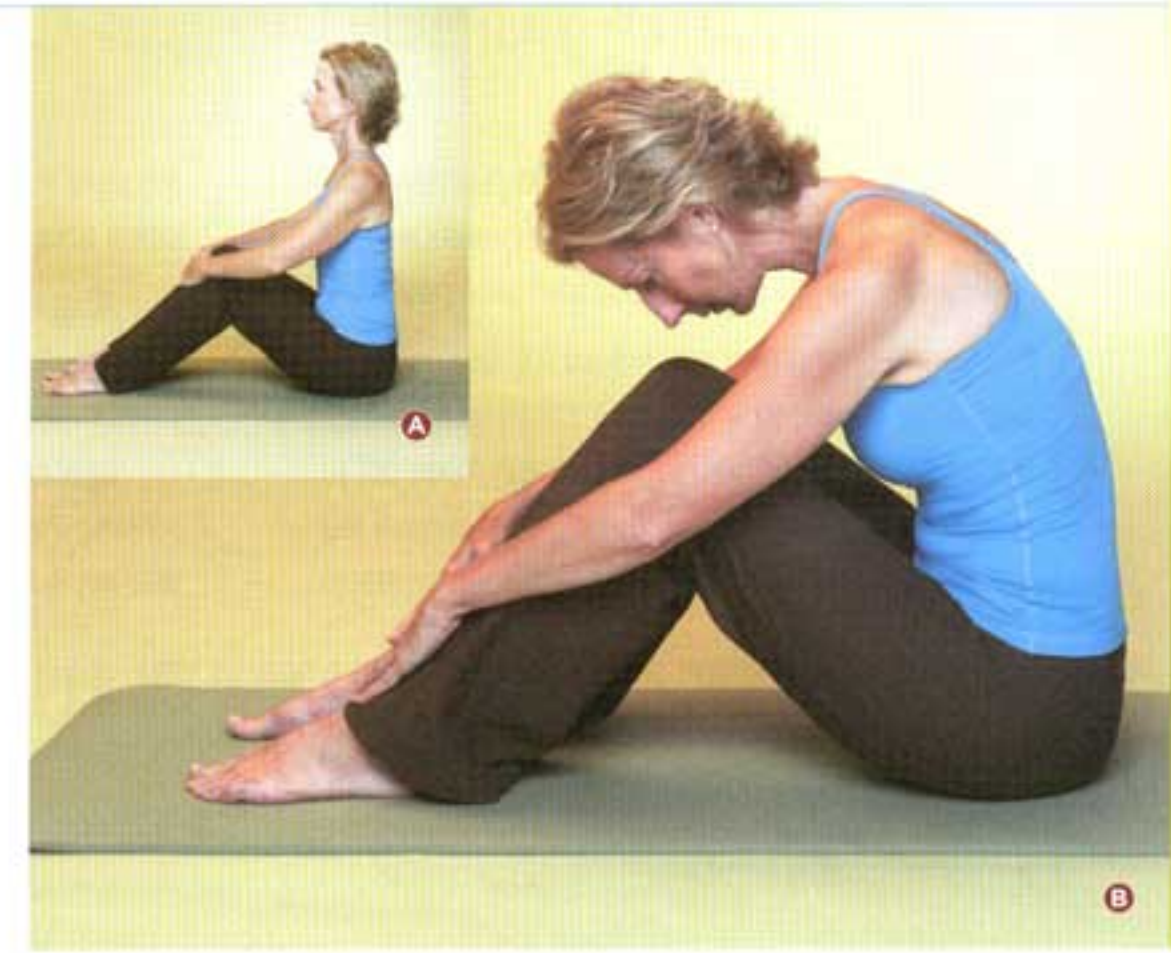
BREATHING

Why it's important It sounds simple, but correcting your breathing pattern helps release tension around the spine, neck and mid-back. Proper breathing helps activate the deep abdominal muscles.

How to Sit tall on your sits bones (the bony part of your bum) with feet on the floor and knees bent; relax hands on the outside of your calves (A). Slowly inhale through your nose and exhale through the mouth to encourage a fuller breath. Inhale; then exhale, flex your torso forward and allow your body to relax over the thighs (B). Inhale and hold the position. Exhale as you lengthen your spine back to a sitting position. Repeat three times.

Tight lower back? Sit on a pillow or chair instead of the floor.

Technique tricks As you breathe, focus on the ribs expanding out to the sides rather than your shoulders moving up and down.





Be careful to reach, not bounce, as you twist into the movement.

POSTURE PERFECT

Try these simple adjustments to stand (or sit) a little taller throughout the day.

✦ Walk this way

Lie on your back and bend your knees. You should be able to put a glass of water on your abs without spilling it: This is a neutral position. Visualize how this feels and how your pelvis is positioned. When walking, recreate this pelvic posture. "Your pubic and hip bones should be in

the same plane when you walk or stand," says Merrithew. "Don't over-arch your back or hunch your shoulders forward."

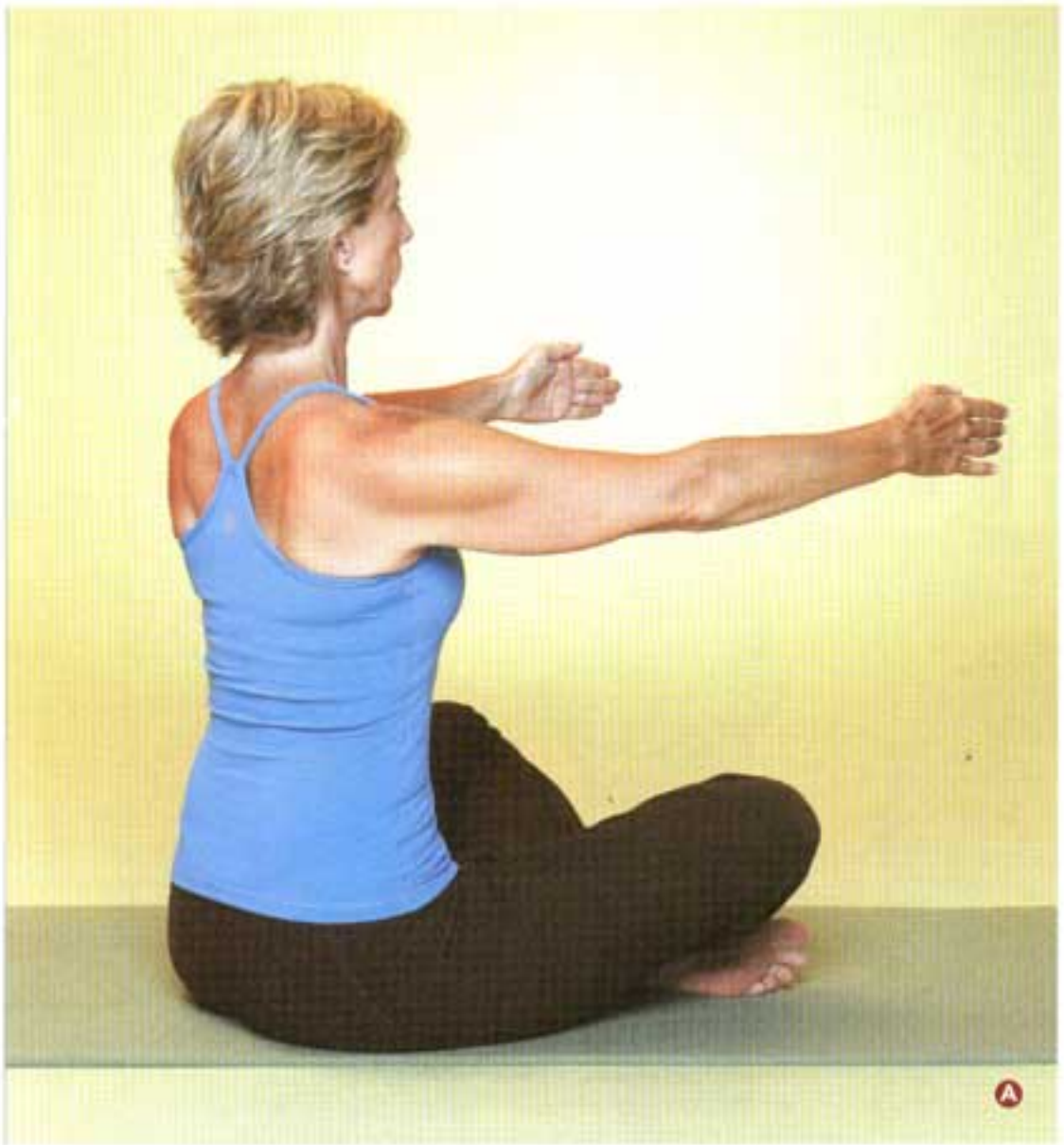
✦ Behind the wheel

"We turn into turtles and throw our neck back when we drive," says Merrithew. Think about bringing your ears away from your shoulders. This one little tip makes it impossible to slouch. It's also important to adjust the seat after another driver has been in it, and to think about getting lumbar support. When driving longer distances, you should stop every hour or two for a quick stretch.

"Sitting can compress the sciatic nerve," says Merrithew. Small bursts of movement will help.

✦ At the computer

"The worst thing for posture is sitting at a desk hunched over a computer," says Merrithew. To help straighten your spine, avoid leaning back in your chair. Sit on the front half of the seat with your legs uncrossed. Your chair should be high enough that your knees are slightly lower than your hips. Do a few mental checks throughout the day to see that your spine is neutral and your shoulders are not rounding forward.



SHOULDER GIRDLE ISOLATION

Why it's important Helps stabilize the muscles around the shoulder blades. When they are weak and tight, the shoulder blades tend to wing out at the back, and upper back and neck tension occurs.

How to Sit cross-legged on a mat, maintaining a neutral spine (A). Breathe in and glide your shoulder blades toward each other (B). Exhale, moving shoulder blades away from the spine (C). Repeat five to 10 times. This is a very small motion, originating from the muscles around the shoulder blades.

Technique tricks Maintain length in the neck throughout.

BREAST STROKE PREP

Why it's important

Strengthens the upper-middle back, which prevents rounding of the shoulders forward and eases neck tension.

How to Lie on your stomach, nose to the mat, with the tops of feet on the floor hip distance apart. Your palms are on the floor next to your shoulders, elbows down (A). Inhale, separating the shoulder blades. Exhale, extending your upper back to lift your chest off the floor until only the bottom ribs are touching (B). Inhale at the top; then exhale as you return to the starting position. Repeat five to 10 times.

Technique tricks In the start position, imagine reaching your ears and toes in opposite directions.



DIETARY HELPERS

Some of the effects of osteoporosis can be minimized through simple dietary changes. Here are four ways to boost your bone strength:

1. Increase your calcium intake

You already knew calcium is one of the primary bone-forming minerals. But did you know its impact is most pronounced on the bone density of your spine? Many dietitians suggest midlife women consume between 1,000 and 1,200 mg per day through a vitamin supplement and a diet rich in dairy and green veggies. To get you started: An average glass of milk has 355 mg of calcium and a serving of broccoli, 60 mg.

2. Magnify your magnesium

Found in legumes, whole grains, meat, fish and nuts, magnesium has a direct effect on bone quality. Ironically, high-calcium diets can intensify magnesium deficiency, making it even more important to supplement. Women over age 30 should take 320 to 420 mg per day. Keep almonds handy: Just one 100 mg serving has 300 mg of magnesium.

3. Pump up the protein

Past studies hinted that high-protein diets increased calcium excretion from the body. But a new study of postmenopausal women found this to be false. In fact, high-protein diets increase bone synthesis and density in all ages. Aim for about 1 g of protein per pound of body weight. If you're really active, you'll need slightly more. Fish and meat have about 7 g per ounce, and beans about 6.

4. Skip the cola

A recent study in the *American Journal of Clinical Nutrition* found that women who drank a daily cola had lower average bone density than those who did not. Researchers are not sure why, but feel the phosphoric acid in colas may affect bone density. If you have a sweet tooth, try another flavour of pop. The bone-busting results were limited to colas.